



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/509,283B

DATE: 04/24/2002 TIME: 09:14:52

ENTERED

Input Set : A:\7853215999.txt

Output Set: N:\CRF3\04242002\I509283B.raw

```
3 <110> APPLICANT: Kroczek, Richard
 5 <120> TITLE OF INVENTION: Anti-human T-cell costimulating monoclonal antibodies
 7 <130> FILE REFERENCE: 7853-215-999
 9 <140> CURRENT APPLICATION NUMBER: 09/509,283B
10 <141> CURRENT FILING DATE: 2000-08-11
12 <160> NUMBER OF SEQ ID NOS: 5
14 <170> SOFTWARE: PatentIn version 3.0
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 2641
18 <212> TYPE: DNA
19 <213> ORGANISM: 8F4
21 <220> FEATURE:
22 <221> NAME/KEY: CDS
23 <222> LOCATION: 68..667
25 <400> SEQUENCE: 1
26 cqaqaqcctq aattcactqt caqctttqaa cactqaacqc qaqqactqtt aactqtttct
                                                                          60
27 ggcaaac atg aag tca ggc ctc tgg tat ttc ttt ctc ttc tgc ttg cgc
                                                                         109
           Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg
29
                                                                         157
30 att aaa gtt tta aca gga gaa atc aat ggt tct gcc aat tat gag atg
31 Ile Lys Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met
                       20
                                            25
33 ttt ata ttt cac aac gga ggt gta caa att tta tgc aaa tat cct gac
                                                                         205
34 Phe Ile Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp
                   35
                                       40
                                                                         253
36 att gtc cag caa ttt aaa atg cag ttg ctg aaa ggg ggg caa ata ctc
37 Ile Val Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gly Gln Ile Leu
               50
                                   55
39 tgc gat ctc act aag aca aaa gga agt gga aac aca gtg tcc att aag
                                                                         301
40 Cys Asp Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys
                                                                         349
42 agt ctg aaa ttc tgc cat tct cag tta tcc aac agt gtc tct ttt
43 Ser Leu Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe
45 ttt cta tac aac ttg gac cat tct cat gcc aac tat tac ttc tgc aac
                                                                         397
46 Phe Leu Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn
                       100
48 cta tca att ttt gat cct cct ttt aaa gta act ctt aca gga gga
                                                                         445
49 Leu Ser Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly
                   115
                                       120
51 tat ttg cat att tat gaa tca caa ctt tgt tgc cag ctg aag ttc tgg
                                                                         493
52 Tyr Leu His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp
53
               130
                                   135
```





## RAW SEQUENCE LISTING DATE: 04/24/2002 PATENT APPLICATION: US/09/509,283B TIME: 09:14:52

Input Set : A:\7853215999.txt

Output Set: N:\CRF3\04242002\I509283B.raw

	e Gly Cys A			tgc att ttg gga Cys Ile Leu Gly 155	
			aag aag tat	tca tcc agt gtg	cac 589
58 Ile Leu Ile				Ser Ser Ser Val	
	r ggt gaa t		ato aga oca	gtg aac aca gcc	aaa 637
_		-		Val Asn Thr Ala	
62 175	_	80	185		190
63 aaa tct aga	a ctc aca g	at gtg acc	cta taa tat	ggaactc tggcaccc	ag 687
64 Lys Ser Arg	g Leu Thr A	sp Val Thr	Leu		
65	195				
				aagattctct tatt	
				gtgttttgtt caat	
	-			ttggtactgc cgag	
	_	-		cagctcctgt gtgc	-
	_	_		atcagccagt aaaa	
_	_			aatctgcaaa gcaa	
2		_		acctcttctt tctg	
				agctggagct attt	
		_	_	actctccttc aatt	_
			_	gtgccctcaa tttt	
				ctctcaatag agag	
		-		tatgcataca tata	
				ttctccctac aagaa	
				aatggtttac tttg	-
	-		-	tagttctttt tgta	
				tctcatgggg taga	•
				gtcagactat acco	
				gagcagccct ccag	
				cactaggtat totte	
				cattcataat tcca	•
				aaaaaccaca cagc	, ,
				atttggctag aaag	
				tctacttcct gtct	
				tgtaacttta ggtaa	
				agtttacaag tgaga	~ ~
	-	-		atgctggatg tgtad	-
				tttcagctga cttg	0065
		_		gtttctgtgt gtgg	
				gttgtccaag ctgt	
				aataattcac aaaa	
				agattttaac agtag	
98 aggcaaagaa	_	atattcagca	actg		2641
100 <210> SEQ					
101 <211> LENG					
102 <212> TYPE: PRT					
103 <213> ORGANISM: 8F4					

RAW SEQUENCE LISTING DATE: 04/24/2002 PATENT APPLICATION: US/09/509,283B TIME: 09:14:52

Input Set : A:\7853215999.txt

Output Set: N:\CRF3\04242002\I509283B.raw

```
105 <400> SEQUENCE: 2
     106 Met Lys Ser Gly Leu Trp Tyr Phe Phe Leu Phe Cys Leu Arg Ile Lys
     109 Val Leu Thr Gly Glu Ile Asn Gly Ser Ala Asn Tyr Glu Met Phe Ile
                     20
     112 Phe His Asn Gly Gly Val Gln Ile Leu Cys Lys Tyr Pro Asp Ile Val
     115 Gln Gln Phe Lys Met Gln Leu Leu Lys Gly Gln Ile Leu Cys Asp
                                 55
     118 Leu Thr Lys Thr Lys Gly Ser Gly Asn Thr Val Ser Ile Lys Ser Leu
                                                  75
     121 Lys Phe Cys His Ser Gln Leu Ser Asn Asn Ser Val Ser Phe Phe Leu
                         85
                                             90
     124 Tyr Asn Leu Asp His Ser His Ala Asn Tyr Tyr Phe Cys Asn Leu Ser
                     100
                                         105
     127 Ile Phe Asp Pro Pro Pro Phe Lys Val Thr Leu Thr Gly Gly Tyr Leu
     128
                 115
                                     120
     130 His Ile Tyr Glu Ser Gln Leu Cys Cys Gln Leu Lys Phe Trp Leu Pro
     131
             130
                                 135
                                                      140
     133 Ile Gly Cys Ala Ala Phe Val Val Cys Ile Leu Gly Cys Ile Leu
     136 Ile Cys Trp Leu Thr Lys Lys Lys Tyr Ser Ser Ser Val His Asp Pro
                         165
                                             170
     139 Asn Gly Glu Tyr Met Phe Met Arg Ala Val Asn Thr Ala Lys Lys Ser
                     180
                                         185
     142 Arg Leu Thr Asp Val Thr Leu
     143
                 195
     145 <210> SEQ ID NO: 3
     146 <211> LENGTH: 17
     147 <212> TYPE: DNA
    148 <213> ORGANISM: Artificial
     150 <220> FEATURE:
     151 <223> OTHER INFORMATION: Description of Artificial Sequence: Degenerate
oligonucleotide
W--> 153 <221> NAME/KEY: misc_feature
     154 <222> LOCATION: 3, 9, 15
     155 <223> OTHER INFORMATION: n = a, t, g, or c
   ↑ 157 <400> 3
w/-> 158 mgnctsacng aygtnac
     160 <210> SEQ ID NO: 4
     161 <211> LENGTH: 17
     162 <212> TYPE: DNA
C--> 163 <213> ORGANISM: Artificial
     165 <220> FEATURE:
     166 <223> OTHER INFORMATION: Description of Artificial Sequence: Degenerate
```

170 <223> OTHER INFORMATION: n = a, t, q, or c

W--> 168 <221> NAME/KEY: misc\_feature 169 <222> LOCATION: 3, 9, 15

₩}-> 172 <400> 4

oligonucleotide

W--> 173 mgnytdacng aygtnac

17





DATE: 04/24/2002 PATENT APPLICATION: US/09/509,283B TIME: 09:14:52

Input Set : A:\7853215999.txt

Output Set: N:\CRF3\04242002\1509283B.raw

- 175 <210> SEQ ID NO: 5 176 <211> LENGTH: 7
- 177 <212> TYPE: PRT
- 178 <213> ORGANISM: Homo sapiens
- 180 <220> FEATURE:
- 181 <221> NAME/KEY: SITE
- 182 <222> LOCATION: 1
- 183 <223> OTHER INFORMATION: Xaa = Unknown amino acid
- 185 <400> SEQUENCE: 5
- > 186 Xaa Arg Leu Thr Asp Val Thr
  - 187 1